

plantes (Agromyzinae) et des animaux (Oestridae). Ces formations sont toujours placés dans le voisinage immédiat des disques imaginaires des pattes; ne seraient-elles pas un dernier vestige des pattes larvaires? Cette hypothèse paraît vraisemblable, car, si l'on en trouve dans certaines familles de Coléoptères (*Larinus maculosus* et autres), on voit ces rudiments, sous forme de petits mamelons incapables de servir à la locomotion, et néanmoins surmontés de poils sensoriels. Ainsi: la patte des larves d'Insectes, organe à la fois ambulateur et sensitif, pourrait disparaître en tant qu'organe ambulateur, mais persisterait toujours en tant qu'organe sensoriel." Another class of sensorial organ consists of a pair of small cylindrical processes articulated at the base which are found on each segment from the first to the tenth and are located more or less laterally. (Fig. 12.)

SUMMARY

This work is on the first instar larva of *Acridiophaga caridei* (Brèth.), the most effective parasite of *Schistocerca paranensis* Burm. Two particularities must be pointed out: The operation of the oral hooks which move in a horizontal plane and the presence of a pair of claw-like organs, close to the posterior spiracles.

BIBLIOGRAPHY

- Blanchard, E. E., 1939, Los Sarcófágidos argentinos, contribución a su conocimiento. Physis, Buenos Aires, 17: 791-856.
 Brèthes, J., 1906, *Sarcophaga caridei*, una nueva mosca langosticida. An. Mus. Nac. Buenos Aires, (3) 6:297-301.
 Keilin, D., 1915-1916, Recherches sur les larves de Diptères Cyclorhaphes. Bull. Sc. France et Belgique, 49:15-198, 16 lam.
 Snodgrass, R. E., 1924, Anatomy and metamorphosis of the apple maggot. Jour. Agric. Research, Washington 28 (1):1-36.
 ———— 1935, Principles of insect morphology. New York.

SOME AFRICAN MEGACHILID BEES

By T. D. A. COCKERELL

All the bees recorded here will be returned to the British Museum when circumstances permit, except *Megachile natensilla*, which goes to the Museum at Pretoria.

Megachile (*Creightonella*) *weenenica*, new species

Male.—Length about 15 mm.; rather slender, with parallel-sided abdomen; black, including antennae and mandibles, but front femora and tibiae suffused with red in front, apical margin of transverse keel of sixth tergite red, and seventh tergite dusky red; head and thorax with abundant white hair, but scutellum with an admixture of long, black hairs; sides of first tergite with long, white hair, second to fourth with broad, white hair bands at sides, reduced to a

line or broken in middle; fifth tergite with a white hair band, overlapped with orange hairs except at sides; sixth with the basal two-thirds, on each side of the longitudinal keel, covered with dense, bright, orange-fulvous hair; face considerably longer than broad, if we include the front; mesonotum entirely dull; tegulae small and black; wings hyaline, a little dusky, with the broad outer margin darker; first recurrent nervure ending far from base of second submarginal cell; front tarsi with red hair on inner side; front coxae with stout spines; hind tarsi with pale yellow hair on inner side, contrasting with the long, pure white hair of femora and tibiae; transverse keel of sixth tergite with many small teeth, but not emarginate.

Natal: Weenen, January 1926 (H. P. Thomasset). Allied to *M. lichtenburgensis* Brauns from the Transvaal but easily distinguished by the large patches of orange hair on sixth tergite; also, the teeth on margin of keel of sixth tergite are more numerous, about 10.

***Megachile natensiella*, new species**

Male.—Length about 6.5 mm.; aspect of *M. gratiosella*, but with slender black tarsi, small dark tegulae; sixth tergite with a very small inconspicuous incision, bounded on each side by a small sharp tooth. The anterior coxae are toothed. It is close to *M. sarna* Cam., and has similar venation, but the stigma is pale yellowish and the keel of sixth tergite is not deeply incised. The wings are hyaline. The abundant hair of the face is white, with a faint yellowish tinge. The flagellum is considerably shorter than in *M. gratiosella* Ckll. The fifth tergite lacks the white hair band present in *M. gratiosella*; the sixth tergite above is densely covered with white hair, except in middle.

Nata River, Makarikari, August 24–27, 1930. Collected by G. van Son on the Vernay-Lang Kalahari Expedition, and accidentally overlooked when the report on the bees of that expedition was prepared.

***Megachile pondonis*, new species**

Female.—Length about 15 mm.; rather slender, with long tapering abdomen; black, including antennae, mandibles and legs, except that the tarsi are reddish apically, and the tibiae have a red spot at apex externally; head and thorax with mainly dull white hair, but on face yellowish, long and abundant as in a male; vertex and scutellum with black hair, and short black hairs on mesonotum; abdomen with a large patch of cinereous tomentum, contracted in middle, on fifth tergite; abdomen otherwise almost nude, but the tergites with white hair bands at sides, reduced to a line or almost failing in middle, so that the abdomen does not appear conspicuously banded; the extreme bases of the tergites, when extended, are seen to be red; ventral scopa white at base, but on sternites 2–4 bright fox red, on fifth black; lower margin of hind tibiae and tarsi with silvery white hairs; hind basitarsi broad; mesonotum dull; a little pale hair in suture between mesonotum and scutellum, but not enough to form a conspicuous

band; tegulae with a black disc and broad reddish margin; wings dusky hyaline not darkened apically; first recurrent nervure ending some distance from base of second submarginal cell.

Pondoland: Port St. John, December 1923 (R. E. Turner). This is closely allied to *M. callichlora* Ckll., a species of tropical Africa, and it has a faint greenish tint on abdominal tergites 2 and 3. It is distinguished from this by the yellowish hair of face and the pubescence of the fifth tergite of abdomen. It is also close to *M. caricina* Ckll., from Benguella, but that is smaller, with pure white hair on face, and better developed abdominal bands.

Megachile flavipes Spinola

Egypt: Aswan, February 8, 1921. ♀ (Capt. K. J. Hayward.)

Megachile chrysorrhoea Gerstaecker

Megachile nasalis volkmanni Friese

These two species were taken at Grootfontein, South-West Africa, by J. N. Justice. They are superficially alike yet structurally so different as to be placed in different subgenera.

Megachile caerulea Friese

North Bechuanaland: Ghanzi, Mongalatsila, both sexes, November 26, 1924, nesting in the ground (J. Maurice). This is definitely the same as a female from Gwelo, Southern Rhodesia (Miss Skaife). The antennae are entirely black. A male from Ghanzi, April 19, also collected by J. Maurice, is *M. konowiana* Friese.

Hoplitis rhodesiae, new species♂

Male.—Length, with abdomen curved downward, about 11.5 mm; if abdomen were extended it would be fully 13 mm.; wings short, anterior wing about 7 mm.; black including mandibles, antennae and legs, except that the tarsi are light reddish apically; mouth parts elongated, maxillary palpi extremely small; face (including front) narrow, the orbits parallel, face covered with a long dense brush of white hair, which has a faint yellowish tint; vertex shining on each side at level of top of eyes, but the top of head is dull; antennae with a stout scape and a long slender flagellum; mesonotum and scutellum entirely dull; thorax densely covered with long hair, white at sides and posteriorly, dorsally fulvescent; a channel across base of metathorax shining; tegulae pale testaceous; wings hyaline, faintly dusky; stigma very small, reddish; basal nervure going considerably basad of the oblique nervulus; second submarginal cell receiving both recumbent nervures, the first far from base, the second near apex; legs with appressed silvery hair, long and loose on front tibiae, the front femora with long loose hair, which is lacking on the middle and hind ones; hind tarsi

long and slender; abdomen moderately shining, the tergites with marginal hair bands, very weak on first, successively stronger and orange-tinted on the others, the orange hairs overlapping a narrow band of white; discs of tergites with thin reddish tinted hair; sixth tergite with an impressed line down the middle; there is a small tooth at each side of sixth tergite; seventh tergite produced into two broad, elongate, somewhat divergent lobes. Pulvilli distinct.

Northern Rhodesia: Algoa, March 5, 1910 (Silverlock). Two specimens. The parapsidal marks are linear, and the second abdominal tergite has at base a deep shining sulcus. The posterior coxae are not distinctly carinate. The species can go in *Hoplitis*, but probably should be made the type of a new subgenus which will probably include also *Osmia forficulina* Ckll. from Basutoland, which is readily distinguished by the long apical spines of abdomen and other characters. The caudal lobes are suggestive of *Osmia karoensis* Brauns.

Osmia ausica, new species

Female.—Like *Osmia mediorufa* Ckll., but less robust, the thorax not so broad; tegulae light red; hair of scutellum and base of abdomen white; abdominal bands purer white. The shining keel down middle of clypeus is very distinct.

South-West Africa: Aus, November 8–30, 1929 (R. E. Turner). This is perhaps only a desert race of *O. mediorufa*. It is also closely allied to *O. elizabethae* Brauns.

NOTES ON FIVE WEST INDIAN CHRYSOMELIDAE (Coleoptera)

By DORIS H. BLAKE

The following species have come to the writer's attention in the course of recent work at the United States National Museum. The two species of *Hadropoda* were distributed in the collection too late to be included in my paper on that genus published in 1943.¹

Chlamys conifera Lacordaire

(Pl. 22, fig. 2)

Chlamys conifera Lacordaire, Phyt., 2; 733, 1848.

This was described by Lacordaire from Brazil. His detailed description fits two specimens from Cuba, one collected by Mr. F. Zayas on the Finca Maicas, near the Pan de Matanzas Mountain, Matanzas Province, in May 1933, on *Malpighia*

¹ Blake, New Species of the Genus *Hadropoda* Suffrian from the West Indies: Bull. Museum Comparative Zoology, 92(8):413–441, 1943.